4. NATURAL RESOURCES, OPEN SPACE, RECREATIONAL & AGRICULTURAL RESOURCES ["NORA"]

1. <u>Natural Resources¹</u>

Surface Water Resources

Sheffield has approximately 818 acres of surface water, which represents about 2.6% of the total area of the community. Protecting surface water quality and adjacent areas of sensitive lands is very important to the community. Map 4 identifies major drainage basins and surface waters in Sheffield.

Housatonic River - The most significant water body in Sheffield is the Housatonic River. All surface and ground waters in Sheffield are in the Housatonic watershed. The Mahican Indians migrated east over the mountains and called the area "Hooestennuc", or "The Place Beyond the Mountains." The Housatonic is the largest river in Berkshire County, with its headwaters in Richmond, Lanesboro and Hinsdale. The River drains almost 2/3 of the county eventually flowing into the Long Island Sound to the south. In Sheffield, the meandering river has changed course several times in recent history leaving behind small oxbows that can be seen on aerial photography. The River is the central channel for a glacial water body (Lake Housatonic), which was formed 12,000 years ago by a natural dam at the Great Falls of the Housatonic in Falls Village, Connecticut. The silts deposits in this ancient lake, along with the annual spring replenishment of soils and nutrients at flood time, make the fields surrounding the river some of the best agricultural resources in Massachusetts. The Housatonic River, as it passes through Sheffield, is also one of the most important scenic assets in the region.

This portion of the river has been designated a **State Scenic River** by the Massachusetts Department of Environmental Management (DEM).

The Housatonic has a long history of industrial use, particularly in northern Berkshire County, and PCB levels are high enough to prevent the consumption of fish. Much of the contaminants are contained in river silts and held behind dams north of Sheffield (i.e. Lenox and Lee). Sheffield needs to work with other communities and river-based organizations to ensure that these dams are properly maintained so that silts are not washed downstream when the water level rises.

Konkapot River - Named for a local Indian, Sachem, and the Konkapot River is the second largest river in Sheffield. The Konkapot rises in the hills of Monterey and drains much of New Marlboro. Only its last 2 miles are in Sheffield as it returns from a brief dip into Connecticut and flows through Ashley Falls to the Housatonic. It is primarily surrounded by agricultural fields and provides some of the best trout fishing in the region. Five different mills were located on the Konkapot in Ashley Falls, including the first fulling mill in the United States.

¹ Information from the 1987 *Sheffield Open Space and Recreation Plan* was incorporated in the Natural Resource Inventory.

Schenob Brook - With its origin in the Twin Lakes region of Salisbury, Connecticut, the Schenob Brook is the longest tributary in Sheffield at over 14 miles. The watershed drains the Mt. Washington Plateau into the largely level valley where the brook flows northerly through the extensive wetlands of the Dry Brook Swamp, Barnum Street Swamp and the Guinea Swamp. These alkaline wetlands hold tremendous varieties of flora and fauna, including one of the largest concentrations of rare and threatened species in the region, giving rise to conservation efforts by many state and non-profit organizations, such as the Massachusetts Natural Heritage Program and The Nature Conservancy, which have been involved in protective programs and projects in this wetland area for a number of years.

Ironworks Brook - The Ironworks Brook is a fast moving, steep-dropping, trout stream, which flows approximately 8 miles from the hills surrounding Threemile Pond in northeast Sheffield to the Housatonic River in the middle of town. The Massachusetts Division of Fish and Wildlife (DFW) owns Threemile Pond and the immediate surrounds as a wildlife management, and there is new focus at DFW on this corridor.

Hubbard Brook - The northwest portion of town is drained by this southeasterly flowing brook. About 5 miles long, it has been impounded to form Mill Pond off Bow Wow Road.

Willard Brook - Waters from the Berkshire Trout Farm Pond flow northerly through considerable wetlands to Hubbard Brook above Mill Pond. About 4 miles long, it flows through Faun Lake and Combes Pond and drains Spurr Lake and Harmon Marsh Pond as well.

Soda Spring Creek - This tributary to Ironworks Brook drains the eastern slope of June Mountain and parallels Waters Farm Road for half of its 3.5 miles. Soda Springs Creeks is a small, fast-moving mountain stream. The Sheffield Water Company takes water from a nearby well and the watershed surrounding the well is partially protected through ownership and land use regulations. The Sheffield Soda Springs Company sold "Berkshire Sodium Water" from this source as a health remedy during the late 1800s.

> Please see Map # 4: 'Town of Sheffield Watersheds' behind the MAPS tab.

Open Waters

Mill Pond (Gilligan's Pond) - Located near Sheffield Center on Hubbard Brook, this privatelyowned 108-acre impoundment was historically used for power by local mills. As a Great Pond, it has limited public access (from Miller Avenue and Cook Road), and only experiences moderate recreational use. The pond is developed only on the western shoreline primarily with first and second-homes. Mill Pond has good wildlife value and serves as a staging area for waterfowl in migration. **Threemile Pond** - This 168 acre impoundment is owned by DFW and is the largest pond in Sheffield. Located in the northeast uplands of Town, there are a few private homes on the eastern and western shores. DFW manages this resource for public access and wildlife habitat. The swamp at the upper end has been used by Great Blue heron as a rookery.

Berkshire Trout Pond – This 13-acre impoundment, once used as a private trout hatchery, is now an area of year-round and second-home development. The pond is the third largest body of water in Sheffield. There is no longer public access to this scenic resource.

Spurr Pond - This small (10+ acre) private pond is located in west-central Sheffield off Undermountain Road. It is in the Willard Brook drainage system and there is no public access.

Davis Pond - Davis Pond is a 6-acre waterbody and may be Sheffield's only true bog. This type of northern boggy habitat is uncommon in the Berkshires.

Other open water resources in Sheffield include Harmon Marsh Pond (8 acres), South Faun Lake (18 acres), Faun Lake (6 acres) and Combes Pond (10+ acres). All of these surface waters are located in the Willard Brook drainage area and all are privately held. All offer important wildlife habitat and several have scenic vistas from public roadways as well as potential for greater recreational use.

Wetlands

There is an extensive network of wetlands in Sheffield. Most of the wetlands are located in the western portion of town along Housatonic River, Hubbard Brook, Willard Brook, Dry Brook and Schenob Brook. Map 5: Wetlands & Floodplains below illustrates this extensive wetlands system².

Wetlands, as determined by soils types, vegetation, wildlife habitat, topography, and other criteria, significantly influence land use patterns in Sheffield. In all, wetlands cover approximately 429 acres or 1.4% of the town's total land area based on an interpretation of the State's geographic information system.

Please see Map # 5: 'Town of Sheffield Flood Hazard Areas & Wetlands' behind the MAPS tab.

Wetlands are a significant natural resource in that they provide important plant and wildlife habitat, filter surface waters, have distinct scenic qualities, and buffer certain types of land uses that may impair water quality. The Schenob Brook wetland complex is identified as one of the most unique unspoiled ecosystems in the world. The Housatonic River with its looped backwaters, flood plains and adjacent marshes, also provides significant wetland resources in Sheffield. Community land use

² There are 3 major sources of wetland information used for the Sheffield Wetland Inventory: USGS Maps, wetland characteristics of Hydric Soils identified in the Soil Survey of Berkshire County, and the National Wetlands Inventory.

and open space planning must recognize and ensure that these resources are well protected from potentially detrimental uses.

Floodplains

There are extensive floodplain areas in Sheffield. The wide valley and gentle terrain provide large areas for surface waters to spread out. In total, approximately 6,112 acres (or 20% of the land base) are included in the 100-Year Flood Hazard Area as determined by the Federal Emergency Management Agency (FEMA). Most floodplain areas in Sheffield are located along the banks of the Housatonic River. In the northern section of town, the Housatonic floodplain is quite wide extending across Route 7 to the west. There are also large 100-Year Flood Hazard Areas along the Soda Springs Creek, Hubbard Brook, Willard Brook, Dry Brook, Schenob Brook and around the Barnum Street Swamp.

Floodplains provide the best agricultural lands in the community. They are also an important resource for plant and wildlife habitat, passive recreational uses, and flood control.

Ground Water

In Sheffield, different geologic materials form aquifers of varying importance. The crystal lime rock of the eastern uplands provides very poor aquifers in general as they have relatively little porosity. However, wells of low capacity can often be developed due to the presence of fractures or faults. The same situation applies to the schistose rocks of the Taconic Range on the west. Limestones, dolomites and quartzites of the valley can be excellent aquifers where they are highly fractured or penetrated by water from the surface.

Please see Map # 16: 'Town of Sheffield Ground Water Resources' behind the MAPS tab.

Thick masses of unconsolidated material form the best potential aquifers. Many of them have layers that given them a high porosity and thus a large capacity. Recharge areas (those regions where water can enter the aquifer) for these aquifers tend to be on the sides of the valley so that the elevation of recharge is considerably higher than the valley floor. Based on these characteristics, there may be several areas in Sheffield where higher yield artesian wells could be developed.³

³ Ralph F. Norvitch, "Groundwater Favorability Map"

The term "**ground water**" means water occupying all voids in a geological stratum. If the voids in this stratum are interconnected in such a manner that ground water can flow through the stratum, then the stratum is termed an "**aquifer**." An aquifer may be one of two kinds: If freely connected to the surface throughout its length, it is an unconfined aquifer and the water table constitutes its upper surface. If the aquifer is separated from the surface by an impermeable stratum, then it is termed a confined aquifer. It is in such aquifers that artesian wells can be developed.

Groundwater protection is a concern shared by most people in the community. A large majority of residents in Sheffield rely on private wells as the only source of domestic water supply. The Sheffield Water Company supplies about 500 residents in Sheffield Center with domestic water from groundwater sources. The Company's supply wells are located off Maple Avenue, Water Farm Road, and Route 7. The delineated primary recharge area (i.e. Zone II) for these wells covers a large area of Sheffield and extends into Great Barrington including the Route 7 corridor. The variation in land use controls and potential

contamination sources, particularly along the highway, need to be carefully evaluated to ensure protection of both community and private groundwater supplies.

2. <u>Terrestrial Resources</u>

Topography

Sheffield is a large valley hemmed in on the west by the steep Taconic Mountains, the rough hilly terrain of East Mountain in the northeast, and low hills along the eastern edge. The steeper slopes and higher elevations of the east and west fringes of Sheffield and the wide lower valley of the Housatonic River are illustrated on the Map 7: Sheffield Topography below. The highest points in Sheffield are Race Mountain (2,365) along the Mt. Washington town line, Mt. Patterson (2,050) and Mt. Bushnell (1,834). The lowest point is 648 feet on the Housatonic River in Ashley Falls at the Connecticut State Line.

Route 41 forms the divide on the west side of town between the steep mountains to the west and the Housatonic River valley to the east. The steepest slopes in Sheffield parallel this corridor as the terrain rises quickly from the roadway to the west. There are also steep hillsides forming a protective ridge around the northern end of Threemile Pond along Brush Hill Road. Steep slopes along the west side of West Road form a visual terminus from Route 7. June Mountain between Boardman Street and Soda Spring Creek creates a visual terminus on the northern section of Route 7 to the east with the steeper slopes abutting Soda Creek.

Please see Map # 7: 'Town of Sheffield Topography' behind the MAPS tab. The valley itself, making up the majority of land in Sheffield, shows an uneven topography. Although generally level, ranging from 650 to 700 feet above sea level, the terrain is broken by numerous eskers and drumlins that reach about 850 feet above sea level.

Slopes of 15% or greater are designated as steep terrain on the Sheffield Topography Map. Moderately sloping terrain ranges from 8% to 15%. Steep slope areas are found primarily on the eastern and western borders. These lands are likely to have shallow, unstable soils with high erosion potential, high surface water runoff rates and low percolation rates. These factors can impose major limitations on the use of these lands. However, there are popular locations in Sheffield for ATV and hiking trails.

Bedrock Geology

Sheffield is underlain by four major metamorphic rock types including: Gneiss, Schist, Quartz, and Carbonate. These layers of metamorphic rock were formed as continental shelf deposits, which have been intensively deformed, folded and thrust-faulted in two separate mountain building episodes. The more weather resistant rocks have been eroded by glaciers and weathering, and are located primarily in lower elevations.

Surficial Geology

Surficial deposits are primarily glacial in origin, and composed of sorted (stratified) and unsorted silts, sands and gravels. The major soil types found in Sheffield are grouped into six associations. These associations represent soils of similar limitations.

Soil types found in Sheffield and their general location and properties are noted in the table below.

Soils are described according to several characteristics, each having different qualities for agriculture, construction, or other uses of the land. Among these characteristics are: location, depth to bedrock, structure, depth to water table, periodic flooding, permeability, natural fertility, acidity, and other values. In this way, soils influence the suitability of different areas for various land use purposes. For example:

- Thin soils on steep slopes erode easily and are not good for septic systems;
- Wetland soils are important "sponges" which absorb water during heavy rains; and
- Floodplain soils are generally very fertile and are often best for agriculture.

Throughout the town, soil types and drainage conditions vary widely within a short distance. Scattered areas of deep, well-drained soil suitable for agriculture, housing and commerce are fairly common, and generally located along existing roads. These areas are separated by other soil types that, because of bedrock, poor drainage or steep slopes are better suited for agriculture, recreation, forestry and wildlife uses. (See chart on next page.)

Sheffield Soil Types, Descriptions & General Locations					
Soil Associations	Descriptions	Location in Town			
Lyman-Peru-Marlow-Berkshire	The Lyman soils are well drained and shallow (10-20" to bedrock). Peru soils are moderately well- drained loam underlain by hardpan at 18-30". Marlow soils are well-drained loamy soil underlain by hardpan at 20-30". Berkshire soils are well- drained, loamy, glacial tills. These are steep, shallow, well-drained soils.	This assoc. occupies approx. 15% of the town in the June Mt. Region.			
Pittsfield, -Amenia,-Kendaia	Pittsfield soils are well-drained formed in loamy calcareous glacial till. Amenia soils are similar, but moderately well-drained and underlain by hardpan at about 2 ft. Kendaia soils are poorly drained, formed incalcareous glacial till underlain by hardpan at 18-24".	These steep soils are on the east side and form about 10% of the town.			
Hinckley-Windsor-Merrimac	These soils are excessively drained and developed in thick deposits of sand and gravel.	They occupy about 10% of Sheffield in the Ashley Falls region.			
Hadley-Winooski-Limerick	Hadley soils are well-drained, formed in thick silt along major streams subject to rare flooding. Winooski are similar, but moderately well-drained and occasionally flooded. Limerick soils are poorly drained and subject to frequent flooding.	These occupy 40% of the town in the Housatonic River Valley.			
Amenia-Stockbridge-Pittsfield	Stockbridge soils are well-drained and formed in calcareous glacial till with hardpan at 30". This complex is similar to the Pittsfield-Amenia-Kendaia Assoc. described earlier.	It covers about 25% of western Sheffield.			
Nassau-Bernardstorm-Dutchess	These soils are extremely stony outcroppings on slopes of from 3% to 35%. Bedrock is usually 20" from surface. The well-drained soils have hardpan within 30" of the surface. Hardpans restrict downward movement of water and septic tank sewage. Steep slopes and bedrock make excavating for housing difficult and expensive.	These soils cover Sheffield's western most border, along the mountain ridges.			

Vegetation

Sheffield has great diversity of vegetative species. Bartholomew Cobble alone has a species list of over 800. This variety is an important natural asset and plays a major role in Sheffield's noted quality of life, making it attractive both to residents and tourists alike. Importantly, with 60 rare plant species on the state's "Endangered, Threatened, and Special Concern" list, Sheffield ranks as one of the top towns in Massachusetts. It is imperative that the town protects its irreplaceable native rarities.

Forest Lands - Like a number of other communities in the Berkshires, Sheffield's forested lands are expanding as woodlands cleared in the 19th century for agriculture, logging and charcoal-making grow again in a process known as succession. Lands that have been cutover in Sheffield soon regenerate with woodland species such as aspens, birches, hemlock, and other species somewhat tolerant of shade. This pattern of re-growth is apparent when viewing orthophotos taken of the town in the 1940s compared to those taken 1999.

Sizable tracts of forested land are found extensively in the hilly terrains of Sheffield. The northcentral area of town has the most extensive upland woodlands. The first plants to establish themselves in these regions (the so-called pioneer species) include goldenrods, asters, bedstraws, sumac and dogwood, followed by eastern red cedar or white pine, and northern or gray birch depending on soil characteristics.

Over time and without major disturbances, a mature or climax forest develops. In Sheffield, the most common species are northern hardwoods such as beech, maple, oak, ash, and birch.

Additionally, the wooded slopes of the Berkshire Taconic Plateau along the western border with Mt. Washington are part of one of the largest, healthiest and most diverse forest blocks in the Lower New England ecoregion, which stretches from Maine to Virginia. Because this is a "transition zone", there is an unusual abundance of natural communities and biodiversity including species that are typically considered more northern or southern species that occur here at the edges of their boundaries. This biodiversity is further enhanced by the calcareous bedrock that supports additional rare natural communities including scrub oak and pitch pine as well as high quality common natural areas.

Wetland Vegetation - Sheffield has shrub swamps, tree swamps, wet meadows, and floodplain wetlands and forests. Much of the wooded level lands next to the swamps either have a high water table or poor internal drainage. Some common species include sycamore, black willow, black ash, birch, box elder, and silver maple.

In addition, the southwestern part of Sheffield support some of the highest quality calcarious wetlands in the world. The alkaline nature of these wetlands allow species that don't survive in the normally acidic wetlands in the area to thrive. When combined with the exceptionally clean water flowing down from the forest on the Berkshire Taconic Plateau, these calcium-rich wetlands support a wide variety of high quality common wetland communities and species, but also one of the highest concentrations of rare and endangered species in Massachusetts, leading The Nature Conservancy to name this area as one of its Last Great Places.

3. <u>Wildlife Species & Habitat</u>

A significant amount of Sheffield is identified by the State as important habitat for various species of wildlife as illustrated on Map 8. The State breaks down potential wildlife habitat into three basic designations⁴:

 Core Habitat Area: Most viable habitats for rare species and natural communities in Massachusetts.

⁴ Core Habitat and SNLA were developed by scientists through the Natural Heritage and Endangered Species Program (NHESP). This data is intended for conservation planning purposes only. It should not be used for regulatory purposes. Priority Areas of Rare Species habitats and exemplary natural communities are not equivalent to "Significant Habitat" areas as designated under Mass. Endangered Species Act. These areas are not protected by the Act but the rare species that inhabit them are protected by law.

- Supporting Natural Landscapes Area (SNLA): Areas buffering and connecting Core Habitat Areas, and large naturally vegetated areas that are relatively free from the impact of roads and other development.
- Priority Areas of Rare Species Habitat & Exemplary Natural Communities: Estimated habitats of state-listed rare species and state-protected rare wildlife.

A variety of wildlife habitats exist along the banks of the Housatonic River, Schenob Brook as well as the numerous brooks and streams connecting to them. These surface waters, with extensive wetland systems, somewhat limit development and preserve habitat. The Housatonic River and Schenob Brook corridors provide the longest stretches of undisturbed habitat in Sheffield. The Housatonic River serves as an important guide for migratory birds and large flocks and wide varieties can be seen in town depending on the season.

The Massachusetts Natural Heritage Program has identified a total of 91 rare plant and animal species in Sheffield - 60 plant and 31 animal.⁵ Seventy (70) of these species have been observed in Sheffield in the past 25 years and 17 of them in the last 5 years.⁶ Thirty-four (34) of the plant species are considered endangered while 22 others were classified as threatened.

Rare Species in Sheffield					
Category	Total Species Identified	Observed in Last 5 years			
Fish	3	1			
Amphibians	3	1			
Reptiles	3	1			
Birds	9	2			
Mammals	1	0			
Snails	1	0			
Mussels	2	2			
Crustaceans	7	0			
Insects	2	0			
Vascular Plant	60	10			
Total	91	17			

Source: MA Natural Heritage Program, March 2003

Of the 60 rare animal species listed in Sheffield the following have been observed in the past 25 years: Longnose Sucker, Bridle Shiner, Jefferson Salamander, Spring Salamander, Four-toed Salamander, Spotted Turtle, Wood Turtle, Eastern Box Turtle, Bog Turtle, American Bittern, Common Moorhen, Bald Eagle, Least Bittern, Riverbank Looping Snail, Triangle Floater, Creeper Mussel, and the Northern Spring Amphipod.

Of the 60 rare animal species population inhabiting Sheffield, 9 are listed as being "endangered" and protected under the Massachusetts Endangered Species Act. Four (4) of these endangered animals

have been seen in the last 25 years. The federally listed bald eagle uses Sheffield during spring and fall migrations, and has been seen as recently as 1999.⁷

⁵ Massachusetts Natural Heritage Program, Rare Species Inventory, March 1, 2003;Website – <u>www.state.ma.us/dfwele/dfw/nhesp/nhesp.htm</u>

⁶ The Mass. Natural Heritage Program maintained a category of 'Most Recent Observed' rare species, which indicates that the species was most recently observed within the past 25 years. However, many rare species are difficult to detect even though they are present, and Natural Heritage does not conduct methodical species surveys in each town on a consistent basis. Therefore, the fact that the 'Most Recent Observed' for a species may be several years old should not lead to the interpretation that the species no longer occurs in a town.

⁷ Only those rare species records that are less than 25 years old are used in Natural Heritage project review associated with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) and the Massachusetts Endangered Species Act Regulations (321 CMR 10.00).

Sheffield's great variety of plant life and terrains has led to an especially rich diversity of wildlife. Ample open spaces, excellent edge terrain (boundaries between habitat types) and responsible land management have led to healthy populations of many species. Protecting significant wildlife habitat is essential to maintaining the town and State's biodiversity.

Please see Map # 8: 'Town of Sheffield Natural Resources: Important Habitats' behind the MAPS tab.

4. Environmental Issues & Concerns

On-site Sewage Disposal⁸

With no public sewer system, Sheffield property owners rely on on-site septic systems for sewage treatment in all homes and businesses in the community. Generally, these systems do not pose environmental problems if properly placed and maintained. However, there are isolated areas within the community where poorly drained soils and/or high water table conditions potentially affect subsurface wastewater treatment.

Where on-site septic disposal limitations have been identified, the rate of eutrophication in surrounding surface waters and the water quality of groundwater sources should be carefully monitored. The town can be divided into the following 4 quadrants for the purpose of general septic system suitability analysis based on soil characteristics:

Northeast - This area has steep to moderate slopes, with one large wetland area and several smaller ones. Soils are ledgy along the ridges of the hills and very stony on the steep slopes. Moderate slopes tend to be stony except where land has previously been cleared. The soils are rated moderately severe to severe for on-lot sewage disposal and few houses have been built there. There is very little prime agricultural soil there and a relatively small amount of land is being farmed.

Northwest - This section is generally flat except for the far western slopes. Many of the soils are prime agricultural soils and are being farmed. Housing has not taken much of the prime farmland, because building has occurred mostly along narrow strips on the edges of the few roads there.

Along the far western slopes of town, soils are shallow due to bedrock, and occur on moderate to sever slopes. They often have hardpans and are stony. These all have severe limitations for building and thus little building has occurred.

Southeast - Here the land is mostly flat and heavily farmed with a great amount of prime agricultural soil. It also has some very wet, poorly drained soils. Heavy home building has occurred

⁸ U.S.C.S., "General Soil Limitations for On-Lot Sewage Disposal" from in <u>Berkshire Non-Designated 208 Area Water Quality</u> <u>Management Planning</u>, Berkshire Regional Planning Commission (1980)

in this area over the past 20 years and potential impacts on surrounding surface waters should be closely examined.

Southwest - This area is made up of steep mountains on the very edge of town, with very marshy and wet soils below. There are also areas of rolling, well to poorly drained soils, which have moderately severe limitations for on-site sewage disposal.

Water Resource Protection

The Housatonic River and Schenob Brook serve as important habitats not only for fish and other aquatic species, but also for insects, birds, amphibians, reptiles, and mammals that utilize the surface waters, riverbanks, marshes, floodplain forest, and associated uplands. Protecting water quality, stream flow and the vegetative communities in these corridors and there tributaries should involve continuing conservation effort, monitoring existing potential contamination sources, and controlling potential detrimental land uses in adjacent areas.

Eutrophication

Sedimentation and eutrophication are becoming increasingly evident in some of Sheffield's water bodies. Potential causes such as failing septic systems, agricultural fertilizers, siltation from area erosion, increased drainage water temperatures from impervious surfaces, and invasive aquatic vegetation need to monitored and should be included in the town's long-range planning.

Area of Critical Environmental Concern

Definition of ACEC

Areas of Critical Environmental Concern (ACEC) are places in Massachusetts that receive special recognition because of the quality, uniqueness, and significance of their natural and cultural resources. These areas are identified at the community level and are reviewed and designated by the state's Secretary of Environmental Affairs. ACEC designation creates a framework for local and regional stewardship of these resources. The Schenob Brook drainage basin has been designated by the State as an Area of Critical Environmental Concern (ACEC). This area contains approximately 13,750 acres in Sheffield and Mount Washington including 2,250 acres of wetlands. According to DEM this ACEC, with its associated wetlands, comprises one of the most significant natural communities in the State. It contains the largest continuous calcareous seepage swamps and the finest examples of calcareous fens in the southern New England. It also serves as habitat to over 90 state-listed rare and endangered species.

Water Supply

As noted in the section on Groundwater, the people of Sheffield obtain their water supply from either the Sheffield Water Company or from individual wells. As the Town contemplates future growth, the respective limitations of both sources should be considered.

The Sheffield Water Company is privately owned and serves about 500 households in and around the village center. Although new well sites are being considered, no new extensions to the water

mains are planned. A recent study identified over 60 potential contamination sources to the company's Maple Avenue and Pike Road wells, including the Town Highway Garage.⁹

Elsewhere in Sheffield, ground water supplies for private wells vary widely. Many private wells are subject to the same potential contamination sources as the Sheffield Water Company. The Town and water company must carefully monitor potential sources of point and non-point pollution in aquifer recharge zones.

Air Quality

Sheffield is part of a regional Air Quality Attainment Area. There are several measures that local residents should take to benefit the quality of air locally and regionally:

- Conserve electrical energy
- Utilize alternative power sources when feasible
- Reduce use of fossil fuels for heating, cooling, transportation and manufacturing
- Plant, preserve and maintain trees
- Buy locally and reduce automobile trips
- Choose environmentally safe building materials for new or remodeled structures

Climate Change¹⁰.

Mounting evidence and research indicates that global warming, or the more accurately termed "climate change" is in fact, occurring. The rapid increase in greenhouse gas emissions from human activity has causing the temperature on earth to rise substantially

Some scientific research suggests that the Berkshires may have a climate similar to New Jersey's by 2050 and similar to North Carolina's by 2100, however, this does not just mean a warmer climate but would also be accompanied by numerous environmental and economic impacts. Potential impacts of climate change on Sheffield and the region may include the following:

- Impacts on weather:
 - Extreme and erratic weather patterns bring strong storms, periods of drought and increased precipitation.
 - In the 1990s, insurance companies paid out nearly four times the amount they did in the 1980s due to weather-related natural disasters.
- Impacts on tourism:
 - Maple, Beech, and Birch trees will migrate northwards taking with them the maple syrup industry and the red and orange foliage (12 species of trees are currently suffering from climate change in the Berkshires).
 - o Inconsistent snow cover will send skiers farther north.
 - Warming of water temperature will make it difficult for Trout and other cold water fish to survive.
- Impacts on farming:
 - Increase in pests will cause a change in farming methods and crop production.
 - Impacts on health:

⁹ Sheffield Water Company Water Supply Study, Tighe & Bond, December 2000

¹⁰ Report by Laura Grunfeld submitted to the Economic Development Subcommittee, July 13, 2003.

- Warmer temperatures have already begun to support the proliferation of diseases such as Lyme Disease, West Nile virus, and Equine Encephalitis.
- Increased smog, acid rain, and allergens are aggravating and causing respiratory problems such as asthma, bronchitis and allergies. Associated health costs have escalated.
- Impacts on water supply:
 - Erratic precipitation patterns have and will continue to negatively affect drinking water supplies.

5. Open Space & Recreation Resources

Local, state, federal and private non-profit organizations have initiated a focused effort to conserve valuable resource areas in Sheffield. Integral to this effort is the updated Open Space & Recreation Plan (OPRP), which seeks to provide direction for the community through the inventory of lands in recreation and open space use, management responsibilities, and future enhancements and expansion associated with recommendations contained herein. This Chapter updates and adapts the 1987 *Open Space & Recreation Plan* to fit the context of the overall Master Plan. Together with *Section 5: Our Cultural and Historic Resources*, this section constitutes the new Sheffield Open Space & Recreation Plan.

Open Space & Recreation Definitions

For purposes of classifying the current use of these various sites, the following definitions have been adopted:

- **Conservation lands** are those sites permanently protected in their natural state as wildlife habitat, vegetative buffer zones, open and forested areas of ecological or agricultural value and scenic beauty, and water supply recharge areas. Conservation land is often in proximity to major wetlands, rivers or water that could allow limited forms of passive recreation (e.g. hiking, fishing, and bird watching). They may also be part of corridors for wildlife habitat or farmland.
- Active recreation lands are often improved by facilities such as swings and ball fields or otherwise attracting widespread use (e.g. skate board park).
- Passive recreation lands include those selected conservation lands set aside for low-impact nonintrusive public use.
- Agricultural lands are those currently or formerly used for crop cultivation or the raising of livestock, and soils that are desirable to protect for organic or conventional agriculture.
- Forestry lands are sites currently preserved or managed for cutting and harvesting.
- Other Public Lands is principally used for town or state-related governmental activities such as schools, fire stations or prisons, as well as some vacant parcels that do not currently serve conservation or recreational purposes.

The natural and agricultural setting of Sheffield has long been complemented by efforts to preserve and enhance a variety of public and private lands within the community. However, a sustained cooperative effort between public and private entities is essential to continue to carry out effective conservation programs and to manage the potential impacts of development.

Primary issues are fragmentation from increasing unplanned development, invasive species and the emerging regional demand on open space and recreational resource areas for passive recreational use such as hiking, biking, boating and skiing. These are concerns due to the potential impacts these activities have upon the resources and existing infrastructure and the Town's resource capabilities. However, with careful planning and good stewardship, the increasing interest in Sheffield could become an economic benefit to local business development. It is essential that local land use policies, as

well as those of the state and regional agencies, balance and manage the demand on resources with economic development and the desire to maintain Sheffield's rural character. This section of the plan in addition to *Section 9: The Action Plan* addresses the location, demand, and approaches needed to properly protect open space and recreational resources in the community.

6. Protected Open Space & Recreational Lands

Between federal, state, municipal, non-profit conservation organizations, and private property owners, there is a significant amount and variety of open spaces in Sheffield providing habitat, agricultural uses, scenic views, as well as active and passive recreational opportunities, although compared to many communities in Berkshire County, Sheffield has a fairly low percentage of protected openspace. The following inventory enumerates the acreage of land in Sheffield, which is presently afforded some protection from residential, commercial or industrial development. The Sheffield Conservation, Open Space & Recreation Map below illustrates the location, ownership and general use of these lands.

Regional Comparison of Protected Lands

Sheffield has the 3rd largest land base in Berkshire County with just over 31,000 acres. In 2000 an estimated 5,226 acres were identified as protected open space, either by conservation restriction or ownership. This amounts to 16.8% of Sheffield's total land base.

By comparison, Sheffield ranks 17th in the acreage of protected open space and just 27th in percentage of land protected out of 32 municipalities in Berkshire County. However, Sheffield has the largest amount of private deed restricted land and 2nd highest amount of non-profit owned conservation land in Berkshire County. This is attributable to the hard work and commitment to resource protection by several non-profit conservation organizations in the community.

South County has the smallest percentage of permanently protected open space at 22.9%. In the seven-town Route 7 Corridor Subregion¹¹ the percentage of protected open space is slightly less at 21.7%. In this subregion, Sheffield has the largest land base and the most acres of protected open space. However, in terms of percentage of lands in protected open space, even in the Subregion Sheffield trails Great Barrington, Lenox and Lee.

Primary Use of Protected Properties

Primary Use of Protected Lands in Sheffield, 2003									
				Private					
				Non-					
Primary Use	Federal	State	Town	Profit	Private	Total			
Recreation	968		118		27	1114			
Recreation & Cons.		486		49		535			
Conservation		1217	58	2204	1322	4801			
Agriculture				40	1042	1082			
Unknown					39	39			

In 2003, there are approximately 7,476 acres of publicly and privately protected open space in Sheffield, and about 2,916 acres (or 39%) are accessible to public access.¹² The majority of protected lands in Sheffield are primarily used for conservation purposes and most are held

¹¹ This Subregion includes the towns along or in close proximity of the Route 7 Corridor including Lee, Lenox, Great Barrington, Egremont, Sheffield, Stockbridge, and West Stockbridge.

¹² Based on an interpretation of the Sheffield GIS Maps, MassGIS, and Assessors Office records.

by non-profit organizations such as The Nature Conservancy, Massachusetts Audubon Society, Sheffield Land Trust, and Berkshire Resource Council. Most recreational lands in Sheffield are owned and operated by state and federal agencies such as DEM, DFW, and the National Park Services, which operates the Appalachian Trail.

	Total	Deed	Restri	icted	Owne	ership			**Prote	cted
Community	Acreage	APR		Total		State	Municipal	Nonprofit	Acres	Percent
Adams	14,657	561	234	795		4,256	743	· ·	4,999	34.1%
Alford	7,375			-			4		4	0.1%
Becket	30,581			-	93	3,837	774	1,289	5,993	19.6%
Cheshire	17,599	542		542	362	4,532	748	16	5,658	32.1%
Clarksburg	8,191			-		3,261	123	25	3,409	41.6%
Dalton	14,003	345		345	808	1,564	629	999	4,000	28.6%
Egremont	12,077	137	35	172		1,313	214	423	1,950	16.1%
Florida	15,755			-		5,071	435	191	5,697	32.6%
Great Barrington	29,299	828	15	843	201	7,080	713	1,314	9,308	31.8%
Hancock	22,866	389	131	520		7,515	296	529	8,340	36.5%
Hinsdale	13,872			-	427	1,713	2,311		4,462	32.2%
Lanesborough	18,917			-		2,463	96	1,156	3,715	19.6%
Lee	17,282	129		129	220	2,479	1,267	219	4,185	24.2%
Lenox	13,871		66	66		1,121	1,876	1,641	4,638	33.4%
Monterey	17,512	179	111	290	12	4,550	61	1,722	6,345	36.2%
Mount Washington	14,319			-		7,124	63	852	8,039	56.1%
New Ashford	8,617			-		3,262	5		3,267	37.9%
New Marlborough	30,642	268	1,139	1,407	102	3,605	19	1,975	5,701	18.6%
North Adams	13,205			-	20	1,993	1,779	64	3,856	29.2%
Otis	34,358		31	31	4,554		427	555	5,536	22.7%
Peru	16,646			-		5,980	1,029	417	7,423	44.6%
Pittsfield	27,166			-	22	2,233	2,155	956	5,366	19.8%
Richmond	12,175		327	327		255	208	312	775	6.4%
Sandisfield	33,890		206	206		6,305	299	470	4,047	20.9%
Savoy	23,037		48	48		13,602	79		13,681	59.4%
Sheffield	31,086	1,002	574	1,576	959	1,570	299	2,398	5,226	16.8%
Stockbridge	15,149	83	282	365		171	924	1,156	2,251	14.9%
Tyringham	12,063	62	457	519	1,432	417	14	811	2,674	22.2%
Washington	24,802		145	145		12,152	6,706		18,858	76.0%
West Stockbridge	11,933			-		313	405	62	780	6.5%
Williamstown	29,992	332	403	735		6,202	1,463	1,468	9,133	30.5%
Windsor	22,500	14	137	151		4,581	733	3,203	8,517	38%
County	605,437	4,871	4,341	9,212	4,658	,	26,905	24,223	180,860	29.9%
North	131,053		685	2,120	382	42,179	5,375	1,764	49,700	37.9%
Central	234,681	877	806	1,683	1,570	45,893	18,088	10,721	76,272	32.5%
South	239,703	2,559	2,850	5,409	2,706	37,002	3,442	11,738	54,888	22.9%
Pittsfield MSA	164,691		909		/	20,787	10,968	6,544	40,049	24.3%

**Land Protected through Conservation Restrictions or Ownership; Berkshire Regional Planning Commission

Change in Acres of Protected Open Space in Sheffield, 1994-2003								
Ownership 1994 2002 in Acres								
Federal	898.62	963.28	64.66					
State	1,083.24	1,546.48	463.24					
Town	153.50	85.14	(68.36)					
Private Organizations	811.98	2,270.33	1,458.35					
TOTAL	2,947.34	4,806.41	1,859.07					

Change in Protected Lands

Source: Town of Sheffield Annual Reports

Over the past 10 years Sheffield has added approximately 1,859 acres of protected open space. Since 1994, several private conservation organizations such as The Nature Conservancy, Sheffield Land Trust, As well as the State Division of Fish and Wildlife have added significant resource areas to the list of protected lands. Significant and continuing local efforts to protect natural resources and expand

recreational opportunities are a natural extension of the 1987 Open Space & Recreation Plan.

State and Federal Lands

There are approximately 2,671 acres in Sheffield that are owned by the State and Federal government that currently serve recreation needs and conservation purposes. Federal lands include the Appalachian Trail Corridor in the northern section of Sheffield. These lands amount to approximately 968 acres and are used for passive recreation and conservation purposes by people from around the world. The Appalachian Trail passes through the Berkshires on its route from Maine to Georgia and is one of the most popular recreation attractions in the region. In Sheffield, the trail enters town at East Mountain State Forest, heading west across June Mountain and the Housatonic Valley into Egremont and then dipping back into Sheffield north of Mt. Everett State Reservation.

The State owns and manages a number of properties in Sheffield for conservation, wildlife and recreation purposes amounting to approximately 1,702 acres.

State Owned Lands in S	heffield			
	Size			
Туре	(acres)	Management	Primary Uses	Recreational Opportunities
			Conservation and	Hiking, hunting,
East Mt. State Forest	168.2	Mass. DEM*	Passive Recreation	snowmobiling, XCskiing
				Wildlife area with public
Three Mile Pond Wildlife			Conservation and	access for hiking, hunting,
Management Area	1065.7	Mass. DF&W**	Passive Recreation	fishing, boating
Dolomite Ledge Non-			Conservation and	
Game Area	151.2	Mass. DF&W	Passive Recreation	Hiking
Mt. Everett State			Conservation and	
Reservation	78.9	Mass. DEM	Passive Recreation	Hiking, hunting, XCskiing
Race Brook State			Conservation and	
Reservation	238.6	Mass. DEM	Passive Recreation	Hiking, hunting, XCskiing
			Conservation and	Picnicking, limited boat
Roadside Rest Areas (4)	3.5	MassHighway	Passive Recreation	access

* Massachusetts Department of Environmental Management; ** Massachusetts Department of Fish & Wildlife

Please see Map # 10: 'Town of Sheffield Open Space' behind the MAPS tab.

Town Land

The Town of Sheffield has approximately 257 acres of municipally owned lands between the Town Park, Town Forest, Barnard Memorial Park, cemeteries, the school district, and other public lands¹³. Of these properties, approximately 58 acres would be classified as conservation lands and 118 acres in passive and active recreational uses.¹⁴ Sheffield has an average amount of municipally owned lands compared to other Berkshire County communities, ranking 14th out of 32¹⁵.

Private Non-Profit Lands

There are approximately 2,293 acres in Sheffield owned by private non-profit conservation organizations. Whereas the state is the primary conservation land holder in other municipalities in Berkshire County, Sheffield has more protected lands owned by non-profit organizations.

Open Space Owned and Managed by Non-Profit Organizations						
Total Organization Acres Primary Uses						
		Conservation &				
Appalachian Trail Conference	49.2	Recreation				
Berkshire Natural Resources Council	15.4	Conservation				
Mass. Audubon Society	247	Conservation				
Sheffield Land Trust	275.4	Conservation				
Sheffield Land Trust	39.8	Agriculture				
The Nature Conservancy	1,433.8	Conservation				
Trustees of Reservations	284	Conservation				

The purpose of privately protected open space is to preserve valuable natural and wildlife, agricultural and scenic resources. Where appropriate, some public access is permitted for passive recreational activities. Other areas are restricted due to the sensitive nature of the ecosystems on the properties, such as around Schenob Brook and Black Rock, or because they are working farms.

A number of conservation corridors and blocks link and protect resources in the Schenob Brook Drainage Basin. A significant amount of private non-profit conservation lands are located in the

¹³ This acreage does not include all the acres listed as town-owned properties in the Town Assessor's office. The difference lies in railroad right-of-ways, historic properties, many small lots owned by the Town for the Fire Company, landfill-transfer station, and other small parcels.

¹⁴ The acreage of town lands in conservation and recreational use is based on interpretation of Conservation, Open Space & Recreation Land Map.

¹⁵ Precise numbers of Town-owned acreage vary in this section due to differing dates of data sources.

ACEC in the southwest portion of town. The largest parcel is 494 acres owned by The Nature Conservancy along Schenob Brook including the Simon Tract, Buckner Tract and McMennamin Tract. There are also a number of conservation tracts along the Taconic Range on the west side of Undermountain Road.

Private Conservation Restrictions and APR Lands

There are approximately 2,336 acres of privately protected land in Sheffield. The majority of these properties are farms protected under the Massachusetts Agricultural Protection Restriction Program (APR). The APR program purchases development rights on farmland to permanently protect them while maintaining family ownership of the land. There are 11 APRs in Sheffield totaling 1,540 acres.

Adding up all conservation restricted and APR properties, Sheffield has more privately protected conservation lands than any other community in Berkshire County. Most do not include public access. However, the Botsford conservation restriction is used for access to the Appalachian Trail. (See chart on next page.)

	ly Protected Lands in Sheffield,		
Property Name	Conservation Method	Acres	Primary Use
Bangs	APR	58.25	Agricultural
Rood/Coon (Bennett)*	APR	319	Agricultural
TNC/Bartholomew (Turner)	APR	123.7	Agricultural
Cavalier (Aragi)	APR	96	Agricultural
Chapin (Allen)	APR	153	Agricultural
Pekrul (Douglas)	APR	139	Agricultural
Howden (Howden and Prouty)	APR	12	Agricultural
MLCT/Bluebird Hill (Kelly)**	APR	310	Agricultural
Ziegler/Corn Crib (Ziegler)	APR	27	Agricultural
MA Audubon/LeGeyt (LeGeyt)	APR	160	Agricultural
MA. Audubon/Treiber (LeGeyt)	APR	142	Agricultural
TNC/Smith & Buckner	SLT CR	154	Conservation
Halper	SLT CR	4	Conservation
Saunders	SLT CR	94	Conservation
Myers	SLT CR co-held with BNRC	20	Conservation
TNC/McMennamin	SLT CR co-held with BNRC	28	Conservation
Moskowitz (Chase)	SLT CR co-held with BNRC	34	Conservation
Dixon	SLT CR co-held with BNRC	3	Conservation
Reich,West	SLT CR co-held with BNRC	16	Agricultural
Cader/Reich, West	SLT CR co-held with BNRC	6	Agricultural
Larkin (Thomas/Haynes)	SLT CR co-held with BNRC	10	Recreational
Elsbach (Thomas/Haynes)	SLT CR co-held with BNRC	42	Recreational
Buckner	SLT CR co-held with TNC	100	Conservation
Elsbach	SLT CR co-held with TNC	28	Conservation
Sears/Wood	SLT Deed Restriction	7	Conservation
Lanier	SLT ownership	17	Conservation
Rob's Landing	SLT ownership	30	Conservation
Robins/June Mt.	SLT ownership	143	Conservation
Route 7	SLT ownership	12	Conservation
Schlesinger	SLT ownership	120	Conservation
Gregory	TNC CR	40.8	Conservation
Oleen	TNC CR	99.3	Conservation
Palumbo	TNC CR	22.1	Conservation
Stumo	BNRC CR	180.4	Conservation
Botsford	NPS easement	27.2	Recreational
Chrisman	TNC CR	38.9	Unknown use

Source: Sheffield Assessors Office.

*(Name of farmer for APRs and of original landowner for non-APRs); **Partially in New Marlborough

ATC = Appalachian Trail Conference (formally Trust for Appalachian Trail Lands)

BNRC = Berkshire Natural Resource Council (formally Berkshire County Land Trust & Conservation Fund CR = Conservation Restriction; TNC = The Nature Conservancy; SLT = Sheffield Land Trust; NPS = National Park Service

Private Agricultural Lands

Sheffield has the highest concentration of active farms in the county with a broad range of farming operations including one of the largest private dairies in the State. Dairying continues to play an important role in town, especially as it relates to open space, but major crops are corn (silage) and hay, vegetables, produce, flowers, sod, with other lands in pasturage.

Sheffield boasts a high percentage of land in actual agricultural use compared to other Berkshire County towns. There are approximately 4,086 acres of active agricultural land in Sheffield (over 13% of the total land area of town) of which the vast majority are privately owned by local farmers. The majority of local farms are located along the Housatonic River on river bottom land, which lies roughly between Route 7 and 7A to the west and Boardman Road/Hewins Road/Shunpike Road to the east. Over 2,800 acres or 70% of all agricultural lands in Town are located in this region. However, there is another significant agricultural zone running from Route 7 west all the way to the fields on the slopes of the Taconic mountains on the west side of Route 41, following Lime Kiln Road, Bow Wow Road, Curtiss Road, Sheffield/Egremont Road, and the length of Route 41.

About 2,531 acres of local farmland is located on prime agricultural soils. This exceptional land when properly managed can be farmed continuously or nearly continuously without degrading the environment. It responds very well to organic and non-organic fertilizer and other chemical applications with limited loss of residues by leaching or erosion. It is the most responsive to management and requires the least investment for maintaining productivity.¹⁶ In addition to these excellent existing fields, much of Sheffield's formerly farmed land is now in forest or pasture, but it could still be made available for crops.

In 2003, a total of 34 farming operations were identified in Sheffield, including 4 dairies. All of these farms, while privately owned, contribute to the Town's scenic character, economy, and overall quality of life. While the acceleration of development over the past 20 years has resulted in fewer acres in agricultural use, the type of farming operations are more diverse with a variety of small niche market farms and nurseries.

7. <u>Undeveloped and Unprotected Lands</u>

Some private land in Sheffield is temporarily protected from development under the State's Chapter 61, A and B tax assessment laws. The purpose of this law is to provide local tax relief on active farming, forestry and recreational and wildlife properties assessing them based on the current use rather than "highest and best use". The Forest Tax Law, M.G.L. 61, has proved to be a popular means of reducing the tax load on some landowners. Approximately 2,503 acres are listed under the program in Sheffield.

Chapter 61A, the Farmland Assessment Act, also encourages owners of large lots to maintain the rural, open quality of the Town through the reductions of assessment on land kept in agricultural uses. Approximately 7,114 acres are currently listed under this program, although only about 3,444 acres are presently in agricultural production.

¹⁶ Natural Resource Conservation Service Soil Survey

Chapter 61B allows landowners who oversee land with wildlife habitat and recreational potential to enjoy a reduction of assessment on land. At present, 681 acres are listed under the Recreation Land Taxation Act.

Lands Listed in Chapter 61, A, B and APR							
	Total Acres	On Prime Acres Agri. Soils (
Program	(1)	Acres	%				
Chapter 61/Forestry	2,503.0	261.6	10%				
Chapter 61A/Agriculture	7,114.2	2,088.2	29%				
Chapter 61B/Recreation	680.7	36.3	5%				
APR	1,804.1	253.3	14%				

(1) Sheffield Assessors Records; (2) Interpretation of

(2) Sheffield GIS Maps

Based on an interpretation of the Sheffield GIS Maps, there are approximately 4,086 acres of active farmlands in Sheffield. Of these, about 2,210 are not protected under agricultural preservation or conservation restrictions, or temporarily under Chapter 61A. Additionally, about half of Sheffield's prime agricultural soils, mostly located in the northwest section of Town, are not in agricultural use.

While most local farmers participate under the Chapter 61A program, none of the lands are permanently protected. The program lessens the property tax burden on existing farmlands as long as said lands serve an agricultural purpose. Withdrawal from the program requires the owner to pay the difference in taxes otherwise due over the previous years that the property was in the program. Also, the Town is offered first option to purchase the land, which could be key to achieving community objectives for maintaining agricultural use, protecting open space protection, providing affordable housing, and historic preservation.

Despite its current use, most existing open space in Sheffield is not permanently protected by conservation restrictions, APR's or conservation ownership. There will undoubtedly be land-use change on many agricultural, forestry, and other open space parcels as the Town continues to grow.

A recently community build-out study by the State also indicated the potential for significantly more development over the next 20 years. While Sheffield's build-out projections are widely believed to be overstated, there will be considerably more growth and continuing housing development which, without proper planning will significantly change the rural character of the community.

Zoning regulations and market demands in the South Berkshire Subregion promote new development that has almost exclusively consisted of large single-family homes over the past 10 years. In nearly all of these communities (including Sheffield), the average lot size for new homes has significantly exceeded the average lot size of older residences¹⁷. Large lot single-family home development can unnecessarily use lands valuable for agriculture, open space and recreation purposes.

It is important for the Town to identify and catalogue priority parcels of agricultural, cultural, archaeological, historical, scenic and natural significance as a baseline to operate from. It is also important to investigate and develop methodologies for permanently protecting – including a proper maintenance or management program – these finite resources that provide a visual narrative of the history, culture and quality of life of Sheffield residents. These methods could include conservation ownership, conservation restrictions and APRs to keep properties in family ownership.

¹⁷ Southern Berkshires Region Housing for Everybody Study; For an assessment of lots sizes for new homes in Sheffield see Section 2.1: Who We Are & How We Live.

Please see Map # 11: 'Town of Sheffield Agricultural Resources' behind the MAPS tab.

8. <u>Unique Landscape Characteristics</u>

Scenic Landscapes were identified by the Massachusetts Department of Environmental Management (DEM) as part of an inventory in 1981. Roughly half of the land (approximately 15,342 acres) in Sheffield falls under this designation as illustrated on Sheffield Scenic Lands Map. A long scenic corridor extends along the Housatonic River north to south in Sheffield. Also, a significant portion of the south central portion of town and the western boundary along the Mt. Washington ridgeline and agricultural lands to the east fall under the scenic landscapes designation.

The greatest concentration of pristine lands, some private and some public, are found on the mountains (further away from public view) and along major rivers and water bodies. Expansive wetlands and forests predominate such remote areas. These resources are appreciated by sportsmen and those engaged in such passive recreational activities as canoeing and hiking. The natural beauty of Sheffield draws tourism to the area, which is an important base for local businesses.

Topographic Features

[Please see Map #7 'Town of Sheffield Topography' referenced earlier in this section and behind the MAPS tab.]

The Taconic Range - The highest areas in Sheffield are Mt. Patterson (2,050) and Mt. Bushnell (1,834) in the Taconic Mountain Range. (At 2,365 feet, Race Mt. is the highest visible peak and located in Mount Washington). The Taconic Range is also part of one of the largest unbroken forest blocks from Maine to Virginia. The Appalachian Trail follows the ridgeline of these peaks and is used extensively by both "through" and day hikers. There are exceptional views to the east along the Appalachian Trail as it passes the ledges just below the Race Mountain summit.

Black Rock – Located above Berkshire School at an elevation of 1,500 feet, this rocky cliff and talus slope dominates views from portions of Undermountain Road. This area is owned and managed by The Nature Conservancy.

June Mountain Area (Elevation 1,206 feet) – This area is located in north-central part of Sheffield along the Taconic Range has an extensive upland woodlands. Most lands are privately owned but some conservation had been done in the area, including the Appalachian Trail corridor which links to East Mountain State Forest, town owned land, and land owned by the Berkshire Natural Resources Council and Sheffield Land Trust. This is a valuable timber and wildlife area.

Miles Mountain (Hurlburt's Hill, Elevation 1,034 feet) - The summit of Hurlburt's Hill offers panoramic views up the Housatonic River Valley. The area is owned and maintained by The Trustees of Reservations as part of Bartholomew's Cobble Reservation, which has an extensive trail network and is a very popular picnicking spot.

Little Johnny's Mountain (910 feet) and Bear's Den (840 feet) - These two hills border the Town Park and Town Forest. Geological outcroppings make this area visually interesting. The Boy Scouts have developed several informal trails over the years in this area that are popular with local residents.

Waterfalls and Gorges

Race Brook - This state-owned recreation area consists of a trail leading up to the Appalachian Trail following Race Brook. The steep-sided gorge contains three 75' waterfalls in succession with attractive pools and vistas across the Housatonic River Valley to the eastern highlands. The entire 1.56 mile corridor has been designated a State Scenic River in the "scenic natural landscape" category. Day hiking, back-packing and picnicking are very popular.

Dry Brook – Dry Brook parallels Race Brook to the north. Coming down off Mt. Everett, it drops through a steep narrow gorge before it joins with Race Brook and enters the shrub swamp-filled valley. From the area of the swamp, the majestic views of the steep sided mountains to the west are special attractions. This brook's 2.7 mile-long corridor also shares designation as a State Scenic River with Race Brook in the "scenic natural landscape" category.

Bear Rock Falls - The outflow from Plantain Pond on Mt. Washington drops over high falls on the town line. These falls can be seen from many locations in town and a popular hiking trail leads up to and beyond the Falls.

Sage's Ravine – Located on the Connecticut/Massachusetts border in southwest Sheffield, this steep ravine and brook includes a 70' waterfall. Popular spur trails rise to the Appalachian Trail on the ridgeline above.

Geologic Features

Bartholomew's Cobble - Outcrops of marble and quartzite alongside the Housatonic River are home to over 800 species of plants and 17 endangered or threatened species. A National Natural Landmark, the Cobble is owned and maintained by the Trustee of Reservations, but is open to the public for nature study, hiking and picnicking.

Ashley Quarry - The Ashley Falls Marble Company and the Southern Berkshire Marble Company operated at this quarry from 1876 to 1916 and sold high quality stone throughout the region. The quarries are no longer in operation and are now part of private home sites.

Please see Map # 9: 'Town of Sheffield Scenic Landscapes' behind the MAPS tab.

Riverways

Riverways offer some of the most scenic settings within Sheffield. The 7-mile stretch along the Housatonic River brings one past a variety of terrain illustrating the community's heritage from old industrial sites, farmlands, and more rural and natural surroundings. The Housatonic also provides passive recreational opportunities such as hiking, fishing and canoeing, although fish should not be eaten due to possible PCB bio-accumulation in the fish from upriver. There are 4 canoe access points in Sheffield and public parking is available at the State Rest Areas and the Covered Bridge. Currently, there is no formal trail system along the river.

Over the years, a number of organizations, including the Housatonic River Initiative, Housatonic Valley Association, Housatonic River Restoration, Sheffield Land Trust and The Trustees of Reservations, have been involved in stewardship programs to educate the public about water resources and to remove debris from the rivers through organized voluntary efforts. A "Stream Team" has been organized in Sheffield to collect debris along the river banks, monitor water quality, and advocate for the proper maintenance and cleaning of upstream dams to control pollution and siltation of the river in Sheffield. This has fostered a growing appreciation and awareness of this beautiful natural setting and its potential for passive recreation opportunities.

Scenic Roads

The character of streets bordering many of Sheffield's scenic lands often enhances the public's appreciation of them. Curvilinear layouts, relatively modest widths, non-paved surfaces, and the blending in with the general topography typify many of the collector streets within Sheffield.

Sheffield Scenic Roads*					
Response	Total Responses	%			
Route 41	50	10.0%			
Hewins Street	47	9.4%			
Boardman Street	36	7.2%			
Barnum Street	34	6.8%			
Route 7	23	4.6%			
Salisbury Road	20	4.0%			
All Dirt Roads	20	4.0%			
Cooper Hill Road	19	3.6%			
Egremont-Sheffield Road	18	3.6%			
All Roads	17	3.6%			

As identified in the Community Survey but not officially designated by Town Meeting

According to the Community-wide Survey many roads in Sheffield were identified as scenic. In addition to those listed in the table to the side, Lime Kiln, Giberson, Bow Wow, Bull Hill, Weatogue, Curtiss, Foley, Guilder Hollow, Kelsey, Rannapo, Rebellion, Valley View, and Veely were also identified as having scenic value. However, only Weatogue road has been officially designated a scenic road by the town under Chapter 40, Section 15C of the Massachusetts General Laws, which would require alterations to the roadway, adjacent trees and stonewalls to receive prior consent from the Planning Board.

9. Active and Passive Recreational Opportunities

Both active and passive recreational opportunities are important to Sheffield residents. The community has an abundance of passive recreational resources for hiking, biking, canoeing, fishing, and hunting. The Appalachian Trail and state parks/conservation areas provide for a number of these opportunities, but many passive recreational activities also take place on private lands. Some privately held lands also provide some public access. For example, the Drury Trail, managed by The Nature Conservancy on the Drury Preserve, is open to the public from down to dusk and is accessible from Barnum Street. Likewise, Bartholomew's Cobble, owned by The Trustees of Reservations off Weatogue Road, has a network of public trails and is also open from dawn to dusk; and the Sheffield Land Trust is in the process of improving the trail- access to its property off of Route 41 and its properties off of Boardman Street which are also open to the public.

There are not as many active recreation facilities and organized sports (such as baseball, football, basketball, golf, and soccer) in town. Sheffield, being a small community, has relatively few athletic facilities. The Town Park includes two small ball fields, a playground, and pavilion (which can double as an ice skating rink in the winter). Other public ball fields (baseball, soccer, and football) as well as indoor activities are available at the Mt. Everett Regional School facilities on Berkshire School Road. The Berkshire School, on Route 41, provides ice skating facilities to the public on Sundays in the winter months. There are, however, no public swimming facilities. (See chart on next page.)

A	Active & Passive Recreation Opportunities in Sheffield
Activity	Locations and Remarks
Service and a	No public swimming facilities; several small ponds, lakes, rivers and streams offer private swimming opportunities.
Swimming Disadelations	
Picnicking	Designated public areas in state conservation areas, parks, and rest areas; Town Park
Bicycling	No formal road bits routes but more popular local roads such as Pt 7 Pt - 7A Pt - 41
On-Road	No formal road bike routes but many popular local roads such as Rt.7, Rt 7A, Rt 41, Salisbury Rd., Berkshire School Rd.
Off-Road	No formal public bike trails but several privately owned properties for use by mountain bikes
Boating	
ž	Canoeing is popular along the Housatonic River and there are 4 designated access points in Sheffield, also 3-Mile Pond
Motorized	There are no public boat launch facilities
Horseback Riding	No formal public bridle trails but many dirt roads and private trails offer horseback riding
Ice Skating	Town Park during winter months; on several local ponds; Berkshire School offers public skating on Sundays in the wintertime
Cross Country Skiing	Designated public trails in state conservation areas, AT, Town Park; by permission on private& conservation properties.
Playgrounds	Town Park and Mt. Everett Regional School
Hunting	Designated game areas on state lands; on private lands with permission
ATV/Dirt Bike Trials	No formal public trails but several privately owned properties used for ATVs & dirt bikes
Sledding	Town Park; Several popular locations on private property
Camping	The are no formal campgrounds in Sheffield
Fishing	Popular on local streams, rivers and ponds; public access is available on 3-Mile Pond
Golfing	No golf courses located in Sheffield; however there are two public courses in adjoining Egremont & Great Barrington.
Hiking	Extensive trail systems on AT, state lands, and private lands; limited public trails and links from residential areas to the Center of Sheffield.
Running/Walking	Limited sidewalk system and walking trails; running track located at Mt. Everett Regional School and Berkshire School (private)
Snowmobile Trails	The Southern Berkshires Snowdusters Club has network of trails with permission from private property owners; no formal public trails.
Tennis	Outdoor tennis courts located at Mt. Everett Regional School, Town Park and Berkshire School (private)
Basketball	Indoor and outdoor courts located at Mt. Everett Regional School, Town Park and Berkshire School (private)
Ball fields	
Baseball	Located at Mt. Everett Regional School (2) and Berkshire School (private)
Little League	Located at Town Park (2); and Town Cemetery (1)
Softball	Located at Mt. Everett Regional School (2)
Soccer	Located at Mt. Everett Regional School (2) and Berkshire School (2 private)
Football	Located at Mt. Everett Regional School and Berkshire School (private)
Other field sports	Located at Mt. Everett Regional School and Berkshire School (private)

Expanding recreational opportunities is an important concern to Sheffield residents according to the community-wide surveys and public meetings. When asked "What priority would you set for future recreational facilities?" respondents identified a number of activities. The highest priorities tended to be for additional passive recreational amenities such as bicycling, hiking and walking trails. In terms of active recreation, creating public swimming areas was the highest priority.

RECREATIONAL FACILITY PRIORITIES	HIG	HIGH).	LOW		NON	1E
	#	%	#	%	#	%	#	%
A. SWIMMING AREAS	110	45%	62	25%	41	16%	36	14%
B. PICNIC AREAS	69	30%	87	37%	59	25%	18	8%
C. BICYCLING TRAILS	131	52%	72	29%	31	12%	17	7%
D. CANOE/BOAT LAUNCH	92	40%	71	31%	46	20%	21	9%
E. HORSEBACK RIDING	41	19%	62	28%	87	40%	28	13%
F. ICE SKATING AREAS	83	35%	96	41%	42	18%	16	6%
G.CROSS-COUNTRY SKI TRAILS	97	40%	86	34%	46	19%	16	7%
H. PLAYGROUNDS	77	35%	81	37%	43	20%	16	8%
I. HUNTING AREAS	24	13%	32	17%	80	42%	54	28%
J. ATV TRAILS	15	7%	22	10%	49	22%	132	61%
K. SLEDDING/TOBOGGANING	52	23%	101	45%	46	20%	27	12%
L. CAMPING	44	20%	76	35%	62	28%	38	17%
M. FISHING	75	33%	86	38%	49	21%	18	8%
N. GOLFING	32	14%	32	14%	77	35%	81	37%
O. HIKING	132	56%	68	29%	24	10%	12	5%
P. RUNNING & WALKING TRAILS	137	56%	75	31%	24	10%	8	3%
Q. SNOWMOBILING	15	7%	26	12%	64	29%	116	52%
R. TENNIS	46	21%	79	36%	75	33%	22	10%
S. BALLFIELDS	51	23%	93	43%	57	26%	17	8%
T. OTHER (PLEASE SPECIFY)	9	39%	4	17%	4	17%	6	26%

10. Maintaining Sheffield's Rural Character

In spite of pressure for residential growth, Sheffield has been able to retain much of its openness and rural character. While some key acquisitions and conservation restrictions have been placed on valuable natural, agricultural and scenic resources by various organizations in Sheffield over the past 10 years, it is primarily good luck and the relatively healthy agriculture economy that has maintained this character.

Sheffield's rural character is one of the most important assets in the community. However, the potential is large for a substantial turnover of land ownership over the 10-year period of this Plan, including some families with large land holdings that have maintained Sheffield's landscape. The Town will need to make a concerted effort to ensure that the community retains the rural character, which is so important to the local economy and overall quality of life.

The Open Space/Recreation/Land Use Subcommittee identified six keys to maintaining and preserving Sheffield's rural character. Particular natural and cultural features that are a major focus include:

- Open and farmed fields
- Woodlands uninterrupted by structures or roads
- Undeveloped wooded ridge lines and mountainsides
- Scenic and dirt roads
- Water and wetlands
- Encouraging careful site design to preserve rural character, maintaining traditional development patterns identified through density, scale, and architectural styles in different parts of the community.

NATURAL RESOURCE, OPEN SPACE, RECREATION & AGRICULTURAL RESOURCES ACTION PLAN (NORA)

Sheffield's beauty, heritage, rural character, quality of life and economy are all inextricably tied to its natural resources, open space, recreational and agricultural resources. So is the health of its residents. The farmland, forests, wildlife habitat and recreation areas are important not only for their own purposes, but also for the foundation that they provide for all the related services and the tourism economy, not to mention being a source of fresh, healthy local food and providing areas for the community to exercise.

Overall Goal

Maintain Sheffield's rural character and unspoiled natural and agricultural resources, and preserve, promote and enhance the town's recreational resources.

Keys Aspects of Sheffield's Rural Character

- Open fields.
- Farmed fields.
- Uninterrupted woodlands.
- Undeveloped ridgelines and mountain sides.
- Scenic and dirt roads.
- Water and wetlands.
- Careful site design.
- Nature preserves.

<u>Recommendation 1.</u> Protect significant areas from adverse development.

Resource protection specifically involves lands whose character or qualities significantly promote various open space interests of the community. Very often, conservation of certain physical features or categories of land serve more than one of these interests.

- a. Through the coordination of organizations such as Sheffield Land Trust, The Nature Conservancy, The Trustees of the Reservation and town government, prioritize areas for preservation.
- b. Encourage land owners to secure conservation restrictions on significant lands, along rivers and wildlife or ridgeline corridors.

- c. Encourage the use of Chapter 61, 61A and 61B programs and agricultural preservation restrictions.
- d. Encourage 'Smart Growth' by considering amendments to the zoning by-laws.
- e. Partner with conservation organizations to supplement local efforts to protect, manage or acquire priority or other significant areas for preservation.

<u>Recommendation 2:</u> Protect agricultural and forest lands.

Sheffield is the largest farming community in Berkshire County with a strong farming base and skilled farmers. The landscape maintained by the farms is also at the heart of the rural character that supports the region's critical tourism economy. Securing Sheffield's agricultural lands and landscape means not only protecting the land but also supporting the farmers and farming as a business to keep agriculture a viable economy. The Commonwealth of Massachusetts has made preservation of farmland a priority and Sheffield is in an ideal position to take advantage of this focus and associated resources. (See attached summary of Farmers Forum for details).

a. Encourage, educate and promote participation in Chapter 61, 61A and 61B programs.

The State's Chapter 61, 61A and 61B current use taxation programs encourage landowners to keep their land in Forestry, Agriculture and Recreation and Wildlife Habitat respectively, because of the positive economic, aesthetic, ecological and quality of life benefits such lands provide. These programs offer significant reduction in property taxes.

b. Encourage the town to exercise or assign its right of first refusal under these programs.

In return the town receives the right of first refusal to match any legitimate and official offer on the land that would take it out of that use. Encouraging the use of these programs helps secure the agricultural land base since people are not forced to sell the land to avoid paying taxes that they cannot afford. If they do sell it, the town has the opportunity to purchase the land or assign its right to a qualified non-profit to do the same. With many farmers greatly dependent on rented or leased land, both features are essential to the future of farming.

c. Encourage, educate and promote participation in the Agricultural Preservation Restriction Program.

The Massachusetts Department of Agricultural Resources administers the Agricultural Preservation Restriction (APR) Program, which purchases the development right on farms and farmland. Owners still retain possession of the property and continue to use it for agricultural purposes, while accessing the equity in the land and realizing most of the economic gain that is usually only realized by selling the land. APRs require a local contribution to the purchase price. The Town could facilitate or work with local conservation organizations to facilitate the use of the Program and purchase of APRs.

d. Promote the use of agricultural restrictions.

An agricultural restriction could be purchased by the town and/or conservation organizations, or such restrictions could be donated or sold at less than market value to such entities. This could be used in addition to APRs.

e. Promote the principles of 'Smart Growth'.

Sustainable development that discourages land fragmentation and "sprawl". Building is directed to population centers, marginal land or edges of fields or nestled in the forest and clustered so as not to fragment the agricultural land. The surrounding land can be preserved, allowing farmers to continue their agricultural activities. "Smart Growth" is ecologically and fiscally beneficial to towns and to maintaining community character.

f. Promote through education of Town boards and property owners the value of agriculture and open space to the town.

The Town could directly contact owners of farmland regarding available options to preserve their lands and livelihoods. Publicly promoting agricultural activities through such means as publications, brochures, school programs and farmers markets could also be carried out; the importance and realities of agriculture noted as a part of the town and as a business. The community must find ways to help support these agricultural endeavors to help keep them economically viable, thereby continuing the numerous benefits of the open land. The Conservation Commission and other Town boards and commissions could ensure that owners of large tracts of farmland are well informed about mechanisms to protect land from avoidable suburbanization.

- Support and promote Right-to-Farm laws and concepts.
- Conduct an agricultural assessment and other processes from *Preserving Rural Character Through Agriculture:* A Resource Kit for Planners – New Hampshire Coalition for Sustainable Agriculture
- Work with the Dept. of Agricultural Resources to establish an Agricultural Commission
- Work with interested farmers and assist them in filing forms

- Suggest methods of maintaining "buffer zones" between farm activities and suburban, residential activities in order to protect the farmer from "nuisance" complaints and issues.
- Make available materials on lease agreements for land owners and farmers so that good soil stewardship is ensured.

This could include information on various conservation options and tools available to residents; about the net fiscal benefit that farmland and conservation land provides to the town; and answering questions associated with preserving land as open space. (See additional information from the Farmers Forum).

<u>Recommendation 3.</u> Promote and expand recreational opportunities, management and facilities, especially on town lands and other public 'open spaces'.

It would be ideal to create a system of linked recreational parcels and trails. We could encourage the Town Park Committee, Conservation Commission and local conservation organizations to work together to that end. Volunteer Town Park Committee or Conservation Commission likely have limited time to devote to establishing a sustainable recreational system, so local conservation organizations could help in the creation and management of recreational opportunities on appropriate parcels of existing town-owned and other private land. Massachusetts' strong landowner liability protection laws, make the inclusion of significant private land feasible.

a. Enhance public facilities and services.

Provide adequate services (e.g. parking areas, restrooms, bike racks, canoe access, lighting, etc.) to optimize public use of recreational areas including child safe enclosures (similar to that at the Family Center in Gt. Barrington) and, where possible, accommodating those with disabilities (universal access). These recreational areas could be publicized via signage, brochures, etc.

b. Establish inter-board policies.

The Selectmen could work with the Conservation Commission, Town Park Committee and Highway Department to establish formal policies clarifying the relationships and responsibilities of the various offices, boards, commissions and committees in managing municipal and recreational properties.

c. Encourage volunteer assistance.

Efforts could be coordinated with local conservation and public service organizations, snowmobile club, Boy and Girl Scouts, businesses and volunteers in supporting the creation and maintenance of public open spaces, riverways, trails and other recreational and natural resources.

d. Improve access and linkages.

Upgrade pedestrian, and where appropriate, vehicular access to and within recreational facilities and conservation lands. Provide linkages between protected open spaces and trails connecting recreational sites. Utilizing the Center of Sheffield as an example, some potential links might include the:

- Town Park
- Town Forest
- Covered Bridge
- Mt. Everett and Undermountain Elementary Schools
- Mill Pond (clarify status of Mill Pond access off Bow Wow Rd.)
- Barnard Memorial Park

e. Consider creating a recreation committee.

This committee could oversee the enhancement of existing and development of new recreational opportunities in Sheffield. Special consideration could be given to multi-use trails, which are suitable for year-round uses. Also consider a child friendly fenced in area at the Town Park (i.e. the Family Center in Gt. Barrington).

f. Encourage trail development in population centers and as connectors to existing trails.

Trails to the June Mountain property or in the Bear Rock Falls area using the old Town road access from Route 41 are both potential connectors to the Appalachian Trail and some of the old logging roads around the school and town forest are in close proximity to thickly settled neighborhoods.

g. Consider producing a Sheffield Recreation Handbook.

The Conservation Commission could work with local organizations and businesses to produce a Recreation Handbook listing public recreation opportunities on public and private lands as a resource for area residents and as a tool to promote eco-tourism.

h. Evaluate a public swimming area(s).

The town could evaluate creating a Swimming Area Committee to evaluate natural beach swimming opportunities. The Committee could explore available locations, costs, funding programs and liability issues. Possible sites could include Three Mile Pond (owned by the State) and Mill and Trout Ponds (privately owned) as well as others.

i. Evaluate canoe launch sites to include parking and coordinate regional river access points.

The Town could evaluate enhancing existing canoe access sites and identify key new locations in the long stretches where none are available. Some consideration could be given to providing access and, where appropriate, restroom facilities, parking, picnic areas and attractive signage that would encourage tourism along the Housatonic River as well. Once it has been finalized, resources from the Upper Housatonic National Heritage Area could be useful here. Canoe and kayak use could be facilitated through user-friendly parking and water access points. Coordinating river access on a regional basis could help maximize convenience and utilization.

<u>Recommendation 4.</u> Maintain, enhance and preserve scenic roads, both paved and unpaved.

Massachusetts encourages towns to designate local ways and roads as scenic roads (using local, state or federal designations as appropriate). The goal is to preserve the scenic and rural character of these roads by limiting the removal or disruption of trees, stonewalls and other significant characteristics within their right-of-ways.

The character of scenic roads is often derived from how well their width, surface and grade fits with the existing terrain and community. Historically, trees were planted and stonewalls were erected along these roads. They readily distinguish these byways without visually detaching the roadways from the surrounding landscape.

In anticipation of rapid growth conditions, the narrow, curved, tree-canopied character of these roads can be destroyed by efforts to "upgrade" in order to accommodate a greater anticipated volume of vehicular traffic at greater speeds. By preserving roads of notable visual and historic character, they can act as an extension of open spaces while maintaining their functional purpose as access ways. This form of linkage between open spaces can be readily implemented with little or no cost to the community. These roads also encourage a different level of development and lower travel speeds.

- a. Consider design standards for reconstruction of public ways that complement the surrounding rural character.
- b. Minimize detrimental impacts of public works projects.
- c. Consider designating scenic roads.
- d. Minimize street signs that detract from scenic roads.
- e. Work with local tree groups to inventory, maintain and replace Sheffield's heritage trees.

f. Work with Berkshire Bike Path Council on routes and designations.

<u>Recommendation 5:</u> Protect ecological resources.

Sheffield is blessed with an unusual variety and abundance of high quality natural communities and rare ecological resources. Limited fragmentation of the land, unbroken forest blocks and mountain sides, high-quality water resources, limestone geology and functional family farms have helped to create and maintain a landscape that has drawn a host of conservation organizations to work in Sheffield. Visitors travel from all over the world to see the spring ephemerals at Bartholomew's Cobble and The Nature Conservancy named the Schenob Brook area as one of its "Last Great Places".

a. Ensure by-laws protect town aquifers.

In conjunction with the Board of Selectmen, the Conservation Commission and Planning Board could review and amend existing bylaws as needed to ensure effective provisions are made for:

- Regulating underground storage tanks and disposal of hazardous wastes
- Limiting the percentage of impervious surfaces allowed in areas of groundwater recharge.
- Providing for effective storm water management.

b. Consider an ecological assessment of town land.

The Conservation Commission could commission an assessment of all Town lands to determine what, if any, critical resources they support. Appropriate uses for each parcel could be determined – recreational, educational, timber management, natural area, open space or resale (the latter not on conservation land, but tax-title land that is not ecologically, scenically or recreationally important). Partnership with local conservation organizations could increase the resources available to the town.

c. Protect critical habitat areas in land use change decisions.

The Conservation Commission could obtain and circulate data from the Natural Heritage and Endangered Species Program and other agencies so that all Town board and committees will be aware of areas of rare and threatened species to insure that this information is considered before any land-use changes are considered. The Commission could take advantage of resources available through and to local conservation organizations to help the Commission oversee the updating of such data by means of lists and maps to assist in decision-making by Town boards and committees and education of the public.

<u>Recommendation 6.</u> Protect scenic vistas, mountainsides and ridgelines.

In 1975 Sheffield adopted the Berkshire Scenic Mountain Act and designated the Conservation Commission to carry out the provisions of the statute. This state law is unique to Berkshire County, created because the legislature recognized the value of the county's unspoiled mountains. It enables the Town to guide development activities that may alter or damage certain mountainous regions of the community, conditioning certain land use activities. Each town defines its own specific parameters, but Sheffield can benefit from the work that other Berkshire County towns have done in creating their regulations. This tool can be an important means of guiding growth to preserve scenic mountain sides, ridges and their natural resources which are vital to Sheffield's quality of life, identity, tourist economy and water quality. Boundaries and specific regulations are incorporated into the zoning bylaws. Other non-regulatory means of protecting this vital resource are also available.

- a. Update the Scenic Mountain Act process begun in 1975.
- b. Encourage landowners to enroll in Chapter 61, 61A and 61B programs to help minimize the need and likelihood of conversion of this land.
- c. Work with local conservation organizations to identify priority sites for conservation.

<u>Recommendation 7.</u> Adopt the Community Preservation Act or create a similar mechanism to provide an ongoing source of funds to help implement recommendations in NORA.

In 2000, the Massachusetts legislature passed state-wide enabling legislation allowing Towns to create, through Town Meeting, a Community Preservation Fund, overseen by a Community Preservation Committee that can be used for Affordable Housing, Open Space protection and Historic Preservation. The Commonwealth even has a source of matching funds, from Registry fees. The mechanism is a real estate tax surcharge. A low income exemption is usually included. Prior to the enabling legislation, some communities created their own "land bank" funds by making a home-rule petition to the legislature that utilized a real estate transfer fee as the funding mechanism. This might also be an option for Sheffield.